

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A biochip comprising:
a flat solid support having a surface covered with a metal capable of coordination bonding with a phosphate group; and
at least one biopolymer carrying a ~~free~~ phosphate group OP(O)(OH)_2 being immobilized on said surface by ionocovalent bonding between the ~~free~~ phosphate group of the polymer and the metal.

2. (previously presented) The biochip according to claim 1, wherein the biopolymer is a nucleic acid phosphorylated in the 5' position.

3. (canceled)

4. (previously presented) The biochip according to claim 2, characterized in that the nucleic acid has a polyguanine (polyG) spacer group between the body of the nucleic acid and the phosphate group.

5-6. (canceled)

7. (previously presented) The biochip according to claim 1, wherein the metal is bound to the surface of the support by way of a spacer molecule.

8. (previously presented) The biochip according to claim 7, wherein the spacer molecule comprises a fatty acid chain carrying a phosphonate group to which the metal binds by ionocovalent bonding.

9. (previously presented) The biochip according to claim 1, wherein the metal is zirconium.

10. (previously presented) The biochip according to claim 8, wherein the spacer molecule is octadecylphosphonic acid and the metal is zirconium.

11. (previously presented) The biochip according to claim 1, wherein the support is glass.

12. (previously presented) The biochip according to claim 1, further comprising:

a sheet of glass having a surface covered with a monolayer of zirconium octadecylphosphonate; and

at least one nucleic acid carrying a phosphate group in

the 5' position being immobilized on said surface by ionocovalent bonding between the phosphate group of the nucleic acid and the zirconium.

13. (currently amended) ~~Method~~ A method for making a biochip, as defined in claim 1, comprising immobilizing at least one biopolymer carrying a ~~free~~ phosphate group on a solid support having a surface covered with a metal capable of coordination bonding with a phosphate group, the biopolymer being immobilized on said surface by ionocovalent bonding between the ~~free~~ phosphate group of the polymer and the metal.

14. (currently amended) ~~Method~~ The method according to claim 13, further comprising a step of obtaining the biopolymer carrying a phosphate group.

15. (currently amended) ~~Method~~ The method according to claim 14, wherein the polymer is a nucleic acid phosphorylated enzymatically in the 5' position.

16-18. (canceled)

19. (currently amended) The biochip according to claim [[3]] 2, characterized in that the nucleic acid has a polyguanine

(polyG) spacer group between the body of the nucleic acid and the phosphate group.